BROOKHAVEN NATIONAL LABORATORY Safety & Health Services Division INDUSTRIAL HYGIENE GROUP Standard Operating Procedure: Program Procedure Subject: BNL Ventilation Monitoring Program: Service Delivery by BNL Organizations NUMBER IH62100 REVISION FINAL rev 0 01/06/03 PAGE 1 of 5

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1.0 Purpose & Scope

Purpose: This procedure describes the specific role(s) of each BNL organization in the BNL Ventilation Monitoring program. This document assists management in developing, implementing and coordinating an effective Exhaust Ventilation program that, as a minimum, complies with OSHA 29CFR1910.94, 29CFR1910 subpart Z, and DOE Order 440.1A. The BNL monitoring program comprises three main areas:

- HEPA filter surveillance testing on hazardous emission sources,
- Local Exhaust Ventilation system testing on controls for hazardous substances in the work area, and
- Heating, ventilation and air conditioning (HVAC) complaint investigations.

The BNL Exhaust Ventilation program is implemented through a matrix of several BNL organizations. Members of the following organizations perform one or more roles in the BNL Ventilation Monitoring program:

- Office of Training and Qualification,
- Plant Engineering Division,
- Radiological Control Division- Facility Support Group,
- Safety and Health Services Division- Industrial Hygiene Group, and
- Safety and Health Services Division- Safety Engineering Group.

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2.0 Responsibilities

- 2.1 Each organization that has a role in the BNL Exhaust Ventilation Program is responsible to:
 - 2.1.1 Conduct their operations in accordance with the BNL standards, OSHA regulations and DOE orders,
 - 2.1.2 Qualify their employees to conduct their assigned tasks (as appropriate),
 - 2.1.3 Develop and Maintain procedures and other records (as appropriate),

3.0 <u>Definitions</u>

none

4.0 Prerequisites

none

5.0 Precautions

none

6.0 Procedure (Program Elements)

BNL Program Overview: *Table 6* defines the major roles of each organization assisting in the delivery of services within the BNL Exhaust Ventilation Program.

Table 6

Organization Unit	Role(s)
SHSD	Serve as Exhaust Ventilation program administrator & SBMS Subject Motter Expert
Industrial Hygiene Group	Subject Matter Expert. 2. Conduct periodic regulatory driver reviews and track BNL's
	documentation for compliance.
	3. Perform periodic BNL Program Self Assessments.
	4. Prepare <i>Standard Operating Procedures</i> for IH Group ventilation
	testing operations.

The only official copy is on-line at the SHSD IH Group website. Before using a printed copy, verify that it is current by checking the document issue date on the website.

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Organization Unit	Role(s)
	 Assist RCD in preparation of <i>Standard Operating Procedures</i> for RCD exhaust ventilation testing operations. Qualify SHSD employees in procedures for conducting ventilation testing and design review. Assist RCD in performing initial evaluations of Local Exhaust
	Ventilation system for effectiveness and establishing operating parameters. 8. Conduct or assist RCD in performing HVAC employee complaint
	evaluations. 9. Approve all initial evaluations of Local Exhaust Ventilation system for effectiveness and establishing operating parameters reports.
	10. Ensure the Calibration and maintenance of ventilation testing equipment. 11. Conduct HEPA Filter Surveillance testing
	12. Maintain a HEPA Filter Surveillance Testing Record database. 13. Review training curriculum material.
	14. Perform Project Design Reviews for exhaust ventilation.
SHSD Safety Engineering Group	1. Administer the Project Design Review program. Forward projects with ventilation concerns to the appropriate ESH professional(s) for review.
Radiological Control Division Facility Support Group	 Conduct routine Exhaust Ventilation testing on laboratory hoods. Conduct routine Exhaust Ventilation testing on local exhaust systems for compliance with operating parameters.
	 3. Initiate evaluations of Local Exhaust Ventilation system for effectiveness and establishing operating parameters. 4. Assist SHSD in conducting HEPA Filter Surveillance testing.
	5. Conduct HVAC employee complaint evaluations.
	6. Qualify RCD employees in procedures for conducting ventilation testing and design review.
	7. Prepare <i>Standard Operating Procedures</i> for RCD Facility Support Group Operations.
	8. Maintain routine lab hood and local exhaust system routine testing records.

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Organization Unit	Role(s)
Office of Training and Qualification	 Maintain records of tester qualification training, as submitted by RCD and SHSD. Deliver any site wide training to staff on exhaust ventilation as part of laboratory standard, HazCom, and radiological training.
Plant Engineering	 Design, install, and maintain HVAC systems and exhaust ventilation engineering control systems. Maintain records of maintenance on exhaust systems. Ensure that <i>Acceptance Tests</i> on HEPA, hoods and local exhaust ventilation systems are conducted and passed at the time of construction. Consult with SHSD and/or RCD on adequacy of design of exhaust ventilation for correction of hazardous atmospheres. Place testing portals (holes for duct traverse testing) in exhaust ventilation equipment (for use in periodic validation testing) as per recommendations of SHSD or RCD.

7.0 Implementation & Training

- 7.1 Each organization that has a role in the BNL Exhaust Ventilation Program is responsible to:
 - 7.1.1 Qualify their employees to conduct their assigned tasks (as appropriate),
 - 7.1.2 Develop & maintain documentation of procedures and other records (as appropriate).

8.0 References

- 8.1 29CFR1910.94 OSHA Occupational Exhaust Ventilation Standard
- 8.2 *DOE Order 440.1A*

9.0 Attachments

None

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10.0 <u>Documentation</u>

Document Review Tracking Sheet		
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Periodic Review Record		
Date of Review	Reviewer Signature and Date	Comments Attached